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Open lqra1.c Save

exp9.c lqra1.c

```
1 #include<stdio.h>
2 #include<stdlib.h>
3
4 void insertionsort(int arr[],int n);
5
6 void main()
7 {
8     int arr[10],i,n,x,ch,flag=0;
9     printf("\n Enter size of array");
10    scanf("%d",&n);
11    printf("elements are:%d\n",n);
12    for(i=0;i<n;i++)
13    {
14        scanf("%d",&arr[i]);
15    }
16    insertionsort(arr,n);
17    do
18    {
19        printf("1.insert\n2.search\n3.exit");
20        printf("enter choice");
21        scanf("%d",&ch);
22        switch(ch)
23        {
24            case 1:
25            {
26                printf("\n Sorted array");
27                for(i=0;i<n;i++)
28                {
29                    scanf("%d\t",&arr[i]);
30                }
31                break;
32            }
33            case 2:
34            {
35                printf("\n Enter the number to be searched : ");
36                scanf("%d", &x);
37                int beg = 0, end = n - 1, mid;
38                while (beg <= end)
39                {
40                    mid = (beg + end) / 2;
41                    if (arr[mid] == x)
42                    {
```

C Tab Width: 8 Ln 16, Col 18 INS

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Open lqra1.c Save

exp9.c lqra1.c

```
51 else
52 {
53     beg = mid + 1;
54 }
55 }
56 if (beg > end || flag == 0)
57 {
58     printf("\n %d does not exist int the array", x);
59 }
60 break;
61 }
62 case 3:
63 {
64     printf("\n Finish");
65     break;
66 }
67 default:
68 {
69     printf("\n Invazlid");
70 }
71 }
72 }
73 while(ch!=3);
74 }
75 }
76 void insertionsort(int arr[],int n)
77 {
78     int i,j,temp;
79     for(i=1;i<n;i++)
80     {
81         temp=arr[i];
82         j=i-1;
83         while((temp<arr[j])&&(j>=0))
84         {
85             arr[j+1]=arr[j];
86             j--;
87         }
88         arr[j+1]=temp;
89     }
90 }
91
92
93
```

C Tab Width: 8 Ln 16, Col 18 INS

```
adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC: ~
#i
#l adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~$ gcc iqra1.c
iqra1.c: In function 'main':
voi iqra1.c:16:19: error: expected expression before '[' token
    16 | insertionsort(arr[],n);
        |                  ^
voi
{ adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~$ gcc iqra1.c
int adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~$ ./a.out
pr
sca Enter size of array4
pr elements are:4
for1
{ 2
sca3
} 4
ins1.insert
do 2.search
{ 3.exitenter choice2
pr
pr Enter the number to be searched : 1
sca
swi 1 is present in the sorted array at index : 01.insert
{ 2.search
cas3.exitenter choice
{
printf("\n Sorted array");
```

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